DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006911 Address: 333 Burma Road **Date Inspected:** 28-Apr-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component:** SAS tower

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #10 South and North Tower Shop

North tower lift#1:- Caltrans QA Inspector observed six ZPMC welders in process FCAW process on interior diaphragms of skin plate C. The interior diaphragms located at the elevation 9m to 47.6m. The minimum preheat and maximum interpass temperature requirements for FCAW process are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

South Tower Lift #2:-Caltrans QA Inspector observed two welder performed SMAW repair process on inner corner longitudinal seam weld that connected skin plate A to B. The SMAW repair weld have been repair by ZPMC UT test and located at elevation 56m to 59m diaphragm section. The SMAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

South Tower Lift#2:- Caltrans QA Inspector observed four ZPMC grinders performed grinding process on fit lugs and rat holes of diaphragm that connected skin plate D. The fit lugs and rat holes are located at elevation 53m 65m 74m and 77m diaphragm section. The grinding and FCAW welding process are removing and repair the fillet welds that have been rejected by ZPMC VT inspection. Base on Caltrans observation, no discrepancies were noted.

WELDING INSPECTION REPORT

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Bay #11 East and West Tower Shop

East Tower Lift #2:- Caltrans QA Inspector observed five welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D. The welding located at elevation 9m to 47.6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

West tower lift#2:- Caltrans QA Inspector observed six ZPMC welders in process FCAW process on interior diaphragms of skin plate D. The interior diaphragms located at the elevation 53m to 80.76m. The minimum preheat and maximum interpass temperature requirements for FCAW process welds are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

West tower lift#1:- Caltrans QA Inspector observed five ZPMC welders in process FCAW process on interior diaphragms of skin plate C. The interior diaphragms located at the elevation 9m to 47.6m. The minimum preheat and maximum interpass temperature requirements for FCAW process welds are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer